|  | Application No.  | Applicant(s)   |
|--|--|--|
| Notice of Allowability   | 10/722,257   | TAO ET AL.   |
|  | Examiner   | Art Unit   |
|  | Jacon M. Nalan, Dh. D.   | 1020   |
|  | Jason M. Nolan, Ph.D.  | 1626   |
| The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this ap<br>or other appropriate communicatio<br>IGHTS. This application is subject to | oplication. If not included n will be mailed in due course. THIS |
| 1. This communication is responsive to <a href="https://example.com/11/25/2003">11/25/2003</a> .   |  |  |
| 2. The allowed claim(s) is/are <u>1-19</u> .   |  |  |
| 3. ☐ Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the:   |  |  |
| Certified copies of the priority documents have been received.   |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this national stage application from the   |  |  |
| International Bureau (PCT Rule 17.2(a)).   |  |  |
| * Certified copies not received:   |  |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.                                    |  |  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give  |  |  |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.   |  |  |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |  |  |
| 1)  hereto or 2)  to Paper No./Mail Date   |  |  |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date   |  |  |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  |  |  |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Attachment(s)  |  |  |
| 1. Notice of References Cited (PTO-892)  | 5. Notice of Informal I  | Patent Application (PTO-152)                                     |
| 2.  Notice of Draftperson's Patent Drawing Review (PTO-948)  | 6. Interview Summary   |  |
| 3. ⊠ Information Disclosure Statements (PTO-1449 or PTO/SB/0   | Paper No./Mail Da<br>08), 7. ☐ Examiner's Amend  | ate<br>ment/Comment  |
| Paper No./Mail Date <u>11/25/2003</u>  | 7. 🖂 Examiner's Americ   | ment Comment   |
| 4.   Examiner's Comment Regarding Requirement for Deposit  | 8. 🛛 Examiner's Statem   | ent of Reasons for Allowance                                     |
| of Biological Material   | 9.  Other  |  |
|  | о. <sub>—</sub> опо <u>—</u> .   |  |
|  |  |  |
|  |  |  |
|  |  |  |

Art Unit: 1626

## **DETAILED ACTION**

Claims 1-19 are currently pending in the instant application.

## Information Disclosure Statement

Applicants' information disclosure statement (IDS), filed on November 25, 2003 has been considered. Please refer to Applicants' copy of the 1449 submitted herein.

## Reasons for Allowance

The present invention claims a method for preparing infrared absorbing cyanine dyes according to the structure shown below.

The method of the present invention relies on the reaction between the heterocyclic compound and the chloro-substituted cyclic compound, shown below.

Although this type of reaction has been utilized in the art for producing monomers according to the structure above (n = 1), this reaction has never been used to produce dimers or other polymers (n= 2, 3, 4). Furthermore, with regards to prior art, the references that have utilized a similar protocol for making analogous compounds are silent with respect to dimers and other polymers (n= 2, 3, 4). References that teach compounds according to the structure above include the Japanese patents by Fuji

Art Unit: 1626

Photo Film, provided in the IDS. However, the structures disclosed in the Japanese patents (see JP 11-119421, section [0024] on page 9 of the translation) were prepared from the monomers and *not* in a one-pot synthesis as disclosed herein.

Therefore, the invention of the current application is free of the prior art, which is to say that no reference teaches or suggests the currently pending patent application. Furthermore, the specification provided enables one of skill in the art to make and use this invention.

## Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Nolan, Ph.D. whose telephone number is (571) 272-4356 and electronic mail is <u>Jason.Nolan@uspto.gov</u>. The examiner can normally be reached on Mon - Fri (9:00 - 5:30PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Joseph McKane** can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason M. Nolan, Ph.D.

Examiner Art Unit 1626 KAMAL A. SAEED, PH.D. PRIMARY EXAMINER

Joseph K. M<sup>c</sup>Kane

Supervisory Patent Examiner

Il Sales

Art Unit 1626

Date: June 21, 2006